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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,145	10/24/2003	Arlin R. Jones	10990268-3	1664

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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LEE, CHEUKFAN

ART UNIT	PAPER NUMBER
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2625

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/693,145	<b>Applicant(s)</b> JONES, ARLIN R.	
	<b>Examiner</b> Cheukfan Lee	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on April 13, 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1-4 and 7-12 are pending. Claims 1, 7 and 10 are independent.
2. The indicated allowability of claims 3, 4 and 7-12 (as existed at the time of the previous Office action) is withdrawn. A double-patenting rejection of obviousness-type under 35 U.S.C. 101 follows. Examiner regrets the delay of this rejection.
3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
4. Method claims 1-4 and 7-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over apparatus claims 13, 14, 16, and 17 of copending, parent Application No. 09/395,262. Although

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the conflicting claims are not identical, they are not patentably distinct from each other for the reasons given below.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**Claims 1-4 and 7-12 are anticipated by parent claims 13, 14, 16, and 17.**

Correspondence between claims 1-4 and 7-12 and parent claims 13, 14, 16, and 17 (as presented in the amendment filed April 13, 2007 with changes made in the Examiner Amendment mailed June 7, 2007) is as follows.

Regarding independent claim 1,

the step of "decelerating an object from moving at a first substantially constant speed" corresponds to

parent claim 13 limitations (lines 2-3) "a moving mechanism to selectively move the object at a first substantially constant speed during scanning" and (lines 8-9) "a deceleration distance of the object, during deceleration of the object";

the step of "measuring first reflected light from a first section of the object that moves past an optical sensor during decelerating the object" corresponds to

parent claim 13 limitation (lines 7-8) "measurement of reflected light from a first section of the object";

the step of "moving the optical sensor in a first direction the object moves through the scanning device during scanning for a first distance substantially equal to a sum of an acceleration distance of the object and a deceleration distance of the object" corresponds to

parent claim 13 limitation (lines 12-16) "the controller including a configuration to actuate the scanning mechanism to move the optical sensor in a first direction the object moves during the scanning for a first distance substantially equal to a sum of the deceleration distance of the object and an acceleration distance of the object";

the step of "moving the first section of the object past the optical sensor at the first substantially constant speed in the first direction" corresponds to

parent claim 13 limitation (lines 16-18) "the controller including a configuration to actuate the moving mechanism to move the first section of the object past the optical sensor at the first substantially constant speed in the first direction"; and

the step of "measuring second reflected light from the first section of the object" corresponds to

parent claim 13 limitation (lines 21-22) "the controller including a configuration to cause the measurement of the reflected light used to generate the second data from the first section".

Regarding claim 2, which is understood to include limitation of claim 1,

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the step of “generating a first set of data from measuring the first reflected light” and the step of “generating a second set of data from measuring the second reflected light” correspond to

parent claim 13 limitations (lines 7-8) “first data from measurement of reflected light from a first section of the object” and (lines 9-10) “second data from measurement of reflected light from the first section”, respectively.

Regarding claim 3,

the limitation “wherein: the object includes a medium” corresponds to parent claim 13 limitation “the object”.

Although parent claim 13 does not specify that the object includes a medium, according to the component structure of the system of parent claim 13, one of ordinary skill in the art would have realized that medium type of object is acceptable/suitable as an object to be moved and scanned in the parent claim 13 system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include medium type of object in “the object” of the system of parent claim 13.

Regarding claim 4,

the step of “replacing the first set of data with the second set of data” corresponds to

parent claim 13 limitation (lines 7 and 9-10) “a controller configured to replace first data ...” “with second data ...”.

Regarding independent claim 7,

the step of “decelerating an object from moving at a first substantially constant speed” corresponds to

parent claim 16 limitations (lines 3-4) “a moving mechanism to selectively move the object at a first substantially constant speed during scanning” and (lines 9-10) “a deceleration distance of the object, during deceleration of the object”;

the step of “measuring first reflected light from a first section of the object that moves past an optical sensor during decelerating the object” corresponds to

parent claim 16 limitation (lines 8-9) “measurement of reflected light from a first section of the object”;

the step of “moving the optical sensor in a first direction, opposite a second direction the object moves through the scanning device during scanning, for a first distance substantially equal to a sum of an acceleration distance of the optical sensor and a deceleration distance of the object” corresponds to

parent claim 16 limitation (lines 12-16) “the controller including a configuration to actuate the scanning mechanism in a first direction, opposite a second direction the object moves during scanning, for a first distance substantially equal to a sum of the acceleration distance of the optical sensor and a deceleration distance of the object”;

the step of "moving the optical sensor in the second direction at a second substantially constant speed for a second distance substantially equal to a sum of the acceleration distance of the object and the deceleration distance of the object" corresponds to

parent claim 16 limitation (lines 16 and 18-22) "the controller" "including a configuration to actuate the scanning mechanism to move the optical sensor in the second direction for a second distance substantially equal to a sum of the acceleration distance of the object and the deceleration distance of the object a the second substantially constant speed";

the step of "moving the optical sensor in the first direction for a third distance substantially equal to a sum of a deceleration distance of the optical sensor and a deceleration distance of the object" corresponds to

the parent claim 16 limitation (lines 25-29) "the controller including a configuration to actuate the scanning mechanism to move the optical sensor in the first direction for a third distance substantially equal to a sum of a deceleration distance of the optical sensor and the deceleration distance of the object"; and

the step of "measuring second reflected light from the fist section of the object" corresponds to



parent claim 16 limitation (lines 22-24) "the controller including a configuration to cause the measurement of the reflected light used to generate the second data with the optical sensor from the first section of the object".

Regarding claim 8, which is understood to include the limitations of claim 7,

the step of "measuring third reflected light from a second section of the object corresponding to the acceleration distance of the object that the optical sensor moves past when moving the first distance and the second distance" corresponds to

parent claim 16 limitation (lines 22-25) "the controller including a configuration to cause the measurement of the reflected light used to generate the second data with the optical sensor ... from a second section of the object corresponding to the acceleration distance of the object"

Regarding claim 9, which is understood to include limitations of claims 7 and 8,

the limitations "a first set of data" and "a second set of data" corresponds to parent claim 16 limitations "first data" and "second data", and thus

the step of "generating a first set of data from measuring the first reflected light" [from the first section of the object] corresponds to

parent claim 16 limitation (lines 8-9) "first data from measurement of reflected light from a first section of the object"; and

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the step of “generating a first set of data from measuring the second reflected light [from the first section of the object]” corresponds to

parent claim 16 limitation (line 10) “second data from measurement of reflected light from the first section [of the object]”; and

the step of “replacing the first set of data with the second set of data” corresponds to

parent claim 16 limitation (lines 8-10) “a controller configured to replace first data from measurement of reflected light from a first section of the object, ... with second data from measurement of reflected light from the first section”.

Regarding claim 10,

the step of “decelerating an object from moving at a first substantially constant speed” corresponds to

parent claim 17 limitations (lines 3-4) “a moving mechanism to selectively move the object at a first substantially constant speed during scanning” and (lines 9-10) “a deceleration distance of the object, during deceleration of the object”;

the step of “measuring first reflected light from a first section of the object that moves past an optical sensor during decelerating the object” corresponds to

parent claim 17 limitation (lines 8-9) “measurement of reflected light from a first section of the object”;

the step of "moving the optical sensor in a first direction the object moves through the scanning device during scanning for a first distance substantially equal to a sum of an acceleration distance of the optical sensor and a deceleration distance of the object" corresponds to

parent claim 17 limitation (lines 11-14) "the controller including a configuration to actuate the scanning mechanism to move the optical sensor in a first direction the object moves during scanning for a first distance substantially equal to a sum of the deceleration distance of the object and an acceleration distance of the optical sensor";

the step of "moving the optical sensor in a second direction, opposite the first direction, at a second substantially constant speed for a second distance substantially equal to a sum of the deceleration distance of the object and an acceleration distance of the object" corresponds to

parent claim 17 limitation (lines 15-21) "the controller including a configuration to actuate the scanning mechanism to move the optical sensor in a second direction, opposite the first direction, for a second distance substantially equal to a sum of the deceleration distance of the object and an acceleration distance of the object at the second substantially constant speed";

the step of "moving the optical sensor in the first direction for a third distance substantially equal to a sum of a deceleration distance of the optical sensor and the acceleration distance of the object" corresponds to

parent claim 17 limitation (lines 25-28) "the controller including a configuration to actuate the scanning mechanism to move the optical sensor in the first direction for a third distance substantially equal to a deceleration distance of the optical sensor and the acceleration distance of the object"; and

the step of "measuring second reflected light from the first section of the object" corresponds to

parent claim 17 limitation (lines 21-24) "the controller including a configuration to cause the measurement of the reflected light used to generate the second data with the optical sensor from the first section of the object".

Regarding claim 11, which is understood to include limitations of claim 10,

the step of "measuring third reflected light from a second section of the object corresponding to the acceleration distance of the object that the optical sensor moved past when moving the first distance and the second distance" corresponds to

parent claim 17 limitation (lines 21-24) "the controller including a configuration to cause the measurement of the reflected light used to generate the second data with the optical sensor ... from a second section of the object corresponding to the acceleration distance of the object".

Regarding claim 12, which is understood to include limitations of claims 11 and 10,

the limitations "a first set of data" and "a second set of data" corresponds to

parent claim 16 limitations "first data" and "second data", and thus

the step of "generating a first set of data from measuring the first reflected light"  
[from the first section of the object] corresponds to

parent claim 16 limitation (lines 8-9) "first data from measurement of reflected  
light from a first section of the object";

the step of "generating a first set of data from measuring the second reflected  
light [from the first section of the object]" corresponds to

parent claim 16 limitation (line 10) "second data from measurement of reflected  
light from the first section [of the object]"; and

the step of "replacing the first set of data with the second set of data"  
corresponds to

parent claim 16 limitation (lines 8-10) "a controller configured to replace first data  
from measurement of reflected light from a first section of the object, ... with second  
data from measurement of reflected light from the first section".

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheukfan Lee  
July 5, 2007